

ch. 4.2

p. 212 #1

$$y = 1 - 2x$$

$$x = 0$$

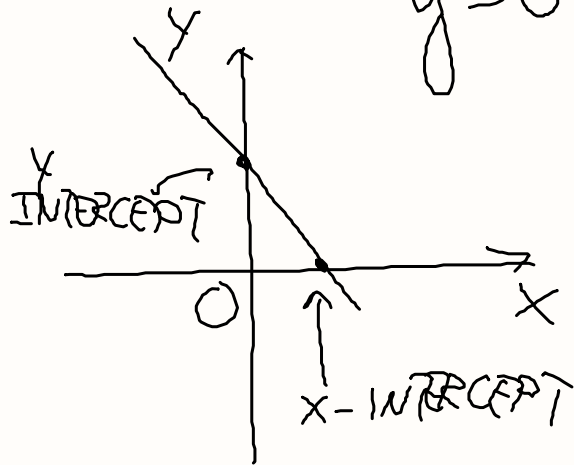
$$y = 1 - 2 \cdot 0 = 1$$

$$y = 0; 1 - 2x = 0$$

$$+ 2x \quad + 2x$$

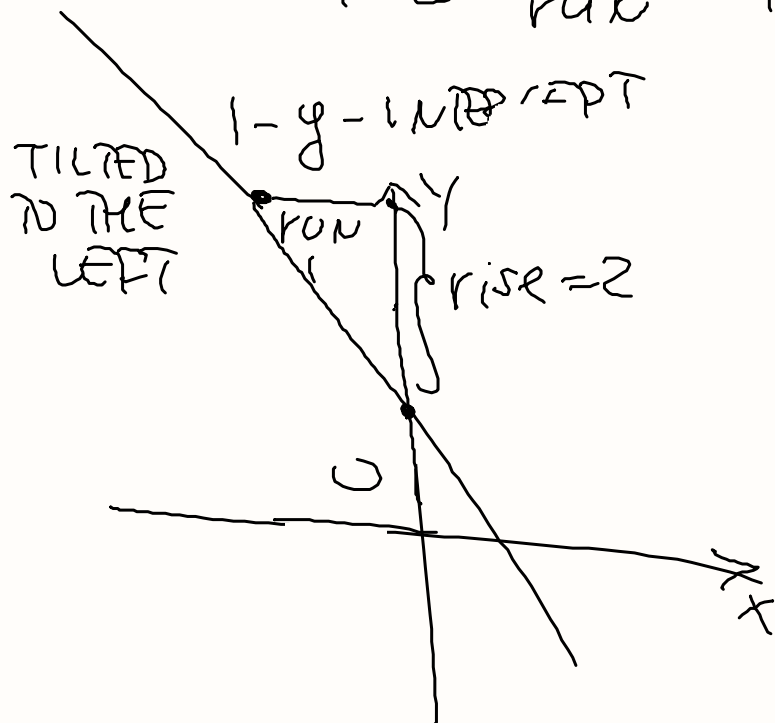
$$\frac{1}{2} = \frac{2x}{2} \quad x = \frac{1}{2}$$

METHOD OF
INTERCEPTS



$$y = 1 - 2x$$

$$m = 2 = \frac{\text{rise}}{\text{run}} = \frac{2}{1}$$



1. INTERCEPT (STARTING POINT)
2. CONSTRUCT SLOPE

p. 212 # 2

$$y = \frac{4}{3}x + 4$$

$$x = 0$$

$$y = ?$$

$$y = \frac{4}{3} \cdot 0 + 4 = 4$$

$$y = 0$$

$$x = ?$$

$$0 = \frac{4}{3}x + 4$$

$$-4$$

$$-4$$

$$\underline{3}(-4) = \underline{\frac{4}{3}x} \cdot \underline{\cancel{3}}$$

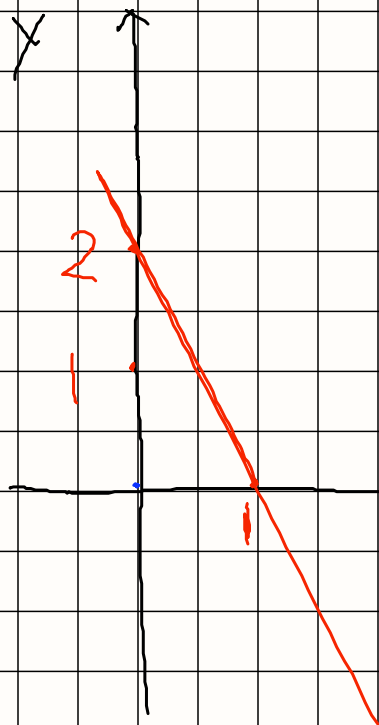
$$\underline{-12} = \underline{\cancel{4}x}$$

$$-3 = x$$

$$(0, 4)$$

$$(-3, 0)$$

#4 p. 212



$$y = mx + b$$

$$m = \frac{\text{rise}}{\text{run}} = -\frac{2}{1} = -2$$
$$b = 2$$

$$y = -2x + 2$$

#5 $(-5, 8)$ $x_1 = -5$ $y_1 = 8$
 $(8, 2)$ $x_2 = 8$ $y_2 = 2$

$$m = \frac{y_2 - y_1}{x_2 - x_1} =$$

$$y = mx + b$$

b - POINT OF INTERCEPTION
OF THE RED LINE WITH
AXIS y

READ EXAMPLE B on p. 211

#6 p. 212

EXAMPLE B $(4, 6)$ $(-2, 3)$
 x_1, y_1 x_2, y_2

$$y = mx + b$$

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{3 - 6}{-2 - 4} = \frac{-3}{-6} = \frac{1}{2}$$

$$y = \frac{1}{2}x + b \qquad 6 = \frac{1}{2} \cdot 4 + b$$

$$6 = 2 + b$$

$y = \frac{1}{2}x + 4$